

Crabs are important to Humans and our ecosystem

Horseshoe crabs are “living fossils”, they have existed nearly unchanged for at least 445 million years, well before even dinosaurs existed. Despite existing for hundreds of millions of years, horseshoe crabs are nearly identical to their ancient relatives. If conditions continue as they are the Horseshoe Crab will disappear from Long Island Sound in our lifetime.

The Issues:

The hand harvest of the breeding population is a major cause of population decline in Long Island Sound. Even though only ~12 permits exist to harvest horseshoe crabs and the reported catch is low, thousands of additional crabs are harvested every spawning season illegally. Local surveys show that there are fewer crabs per survey and more single males. The crabs that are found are older (determined by shell condition) (personal observation and observations reported by citizen scientists of Project *Limulus*). Horseshoe crabs are harvested to use as bait to catch Eel and Conch. Other sources of protein are available to use as bait, one successful fisherman gathers road kill for his traps.

It takes nine to 11 years before horseshoe crabs are fully-grown and sexually mature, they will molt 16 to 17 times. They are very vulnerable when they first molt and need a “safe” place to wait for their new shell to harden. However, in CT we are experiencing loss of habitat due to erosion in both the marshes (nurseries for young crabs) and sandy areas.

Why they matter:

Horseshoe crabs are themselves environments. Scuds, ghost anemones, Asteriids, snail furs, blue mussels, barnacles, sea strawberries, seal lettuce, red beard sponges, eastern oyster, northern rock barnacles, skeleton shrimps, sand builder worms, bushy bugulas, hard tube worms, flat worms, oyster drill eggs and Agardh's red seaweed all make the carapace of the horseshoe crab their home. If we lose the Horseshoe Crab we will lose all of these other species, everything is connected...

Extensive research has been conducted on horseshoe crabs with respect to their eyes and vision. This research has resulted in important findings pertaining to the manufacture of surgical sutures and development of dressings for burn patients. The biomedical companies extract blood from horseshoe crabs to produce a widely used test for the presence of endo toxin. This assures our vaccines and medical devices are safe to use. (CT does not harvest for the biomedical industry)

Horseshoe crabs are part of the food web, Migratory shorebirds rely on the eggs of horseshoe crabs for food.

(Unfortunately, in Ct the population density does not allow for the Horseshoe crab to function within the food web as they have in the past. They are no longer a source for shorebirds and fish in Long Island Sound due to their low numbers.)

Thank you,
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